



# GROW BY DEGREES

A Campaign of the Virginia Business Higher Education Council

## *HONORARY LEADERSHIP*

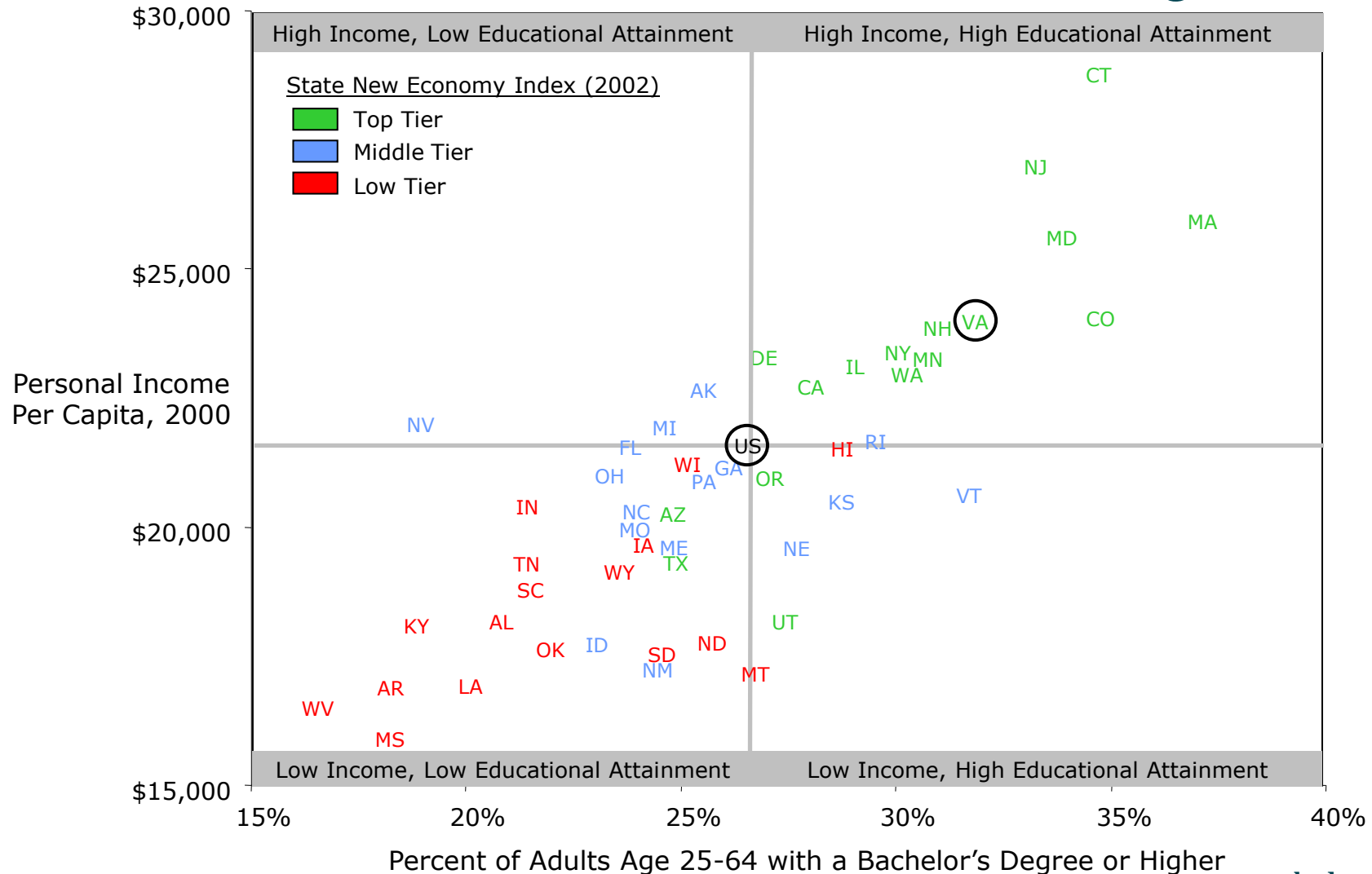
*Gov. Bob McDonnell - Sen. Mark Warner - Sen. Jim Webb*

*Gov. Tim Kaine - Sen. John Warner - Gov. George Allen - Gov. Jim Gilmore*

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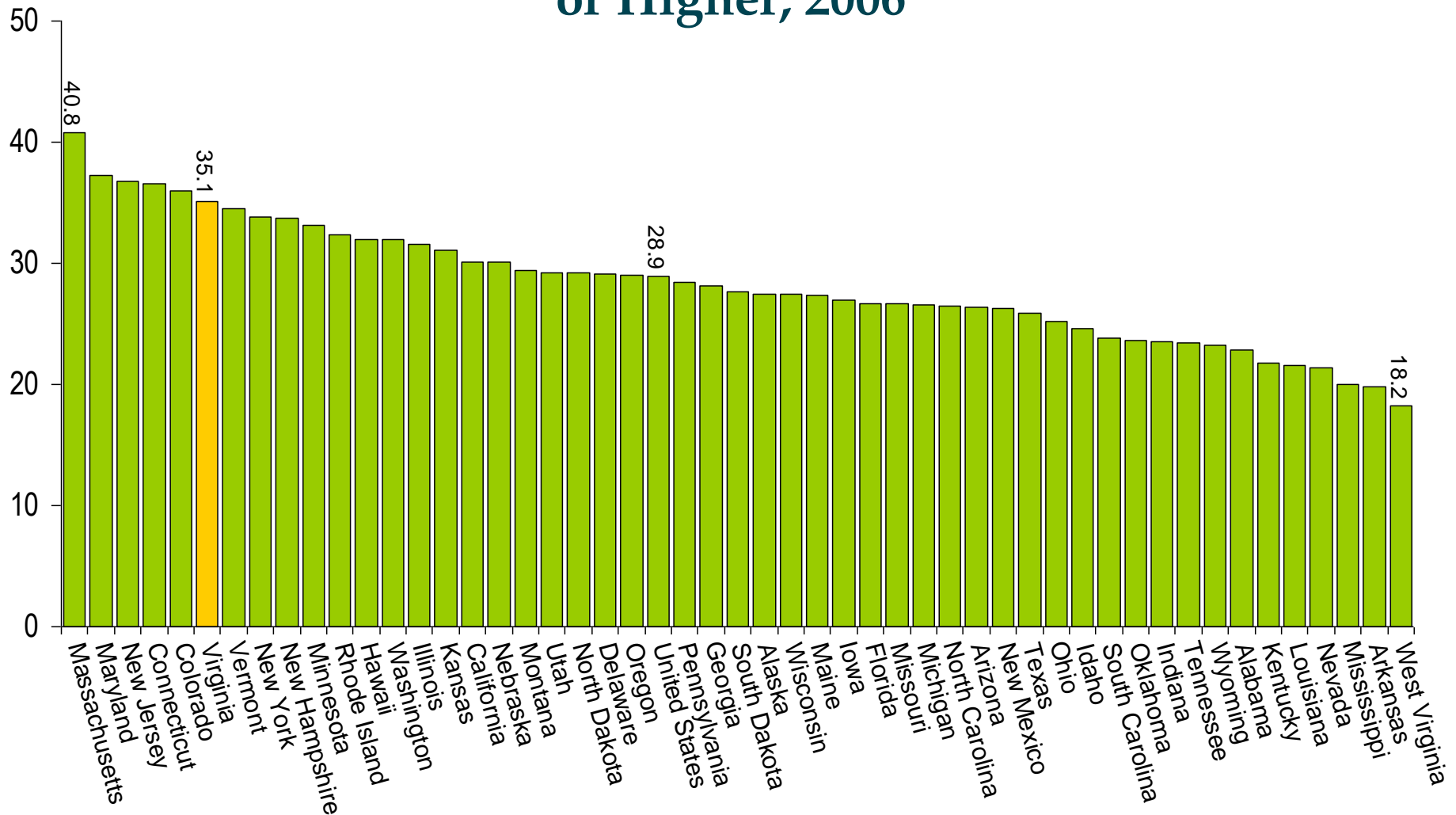


# Relationship Between Educational Attainment, Personal Income, and Economic Strength



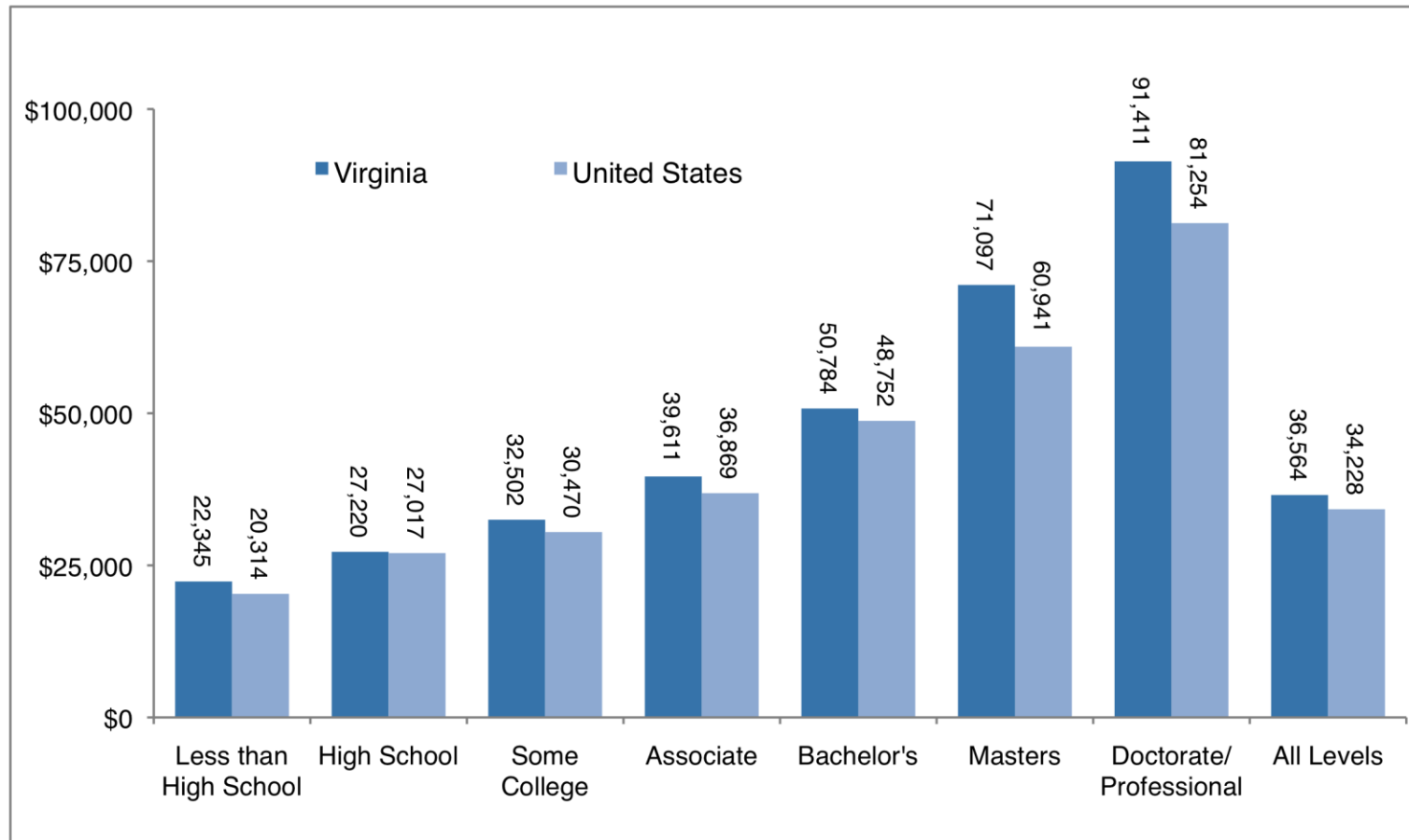


## Percent of Population Age 25-64 with a Bachelor's Degree or Higher, 2006





# Median Earnings by Degree Level, 2006

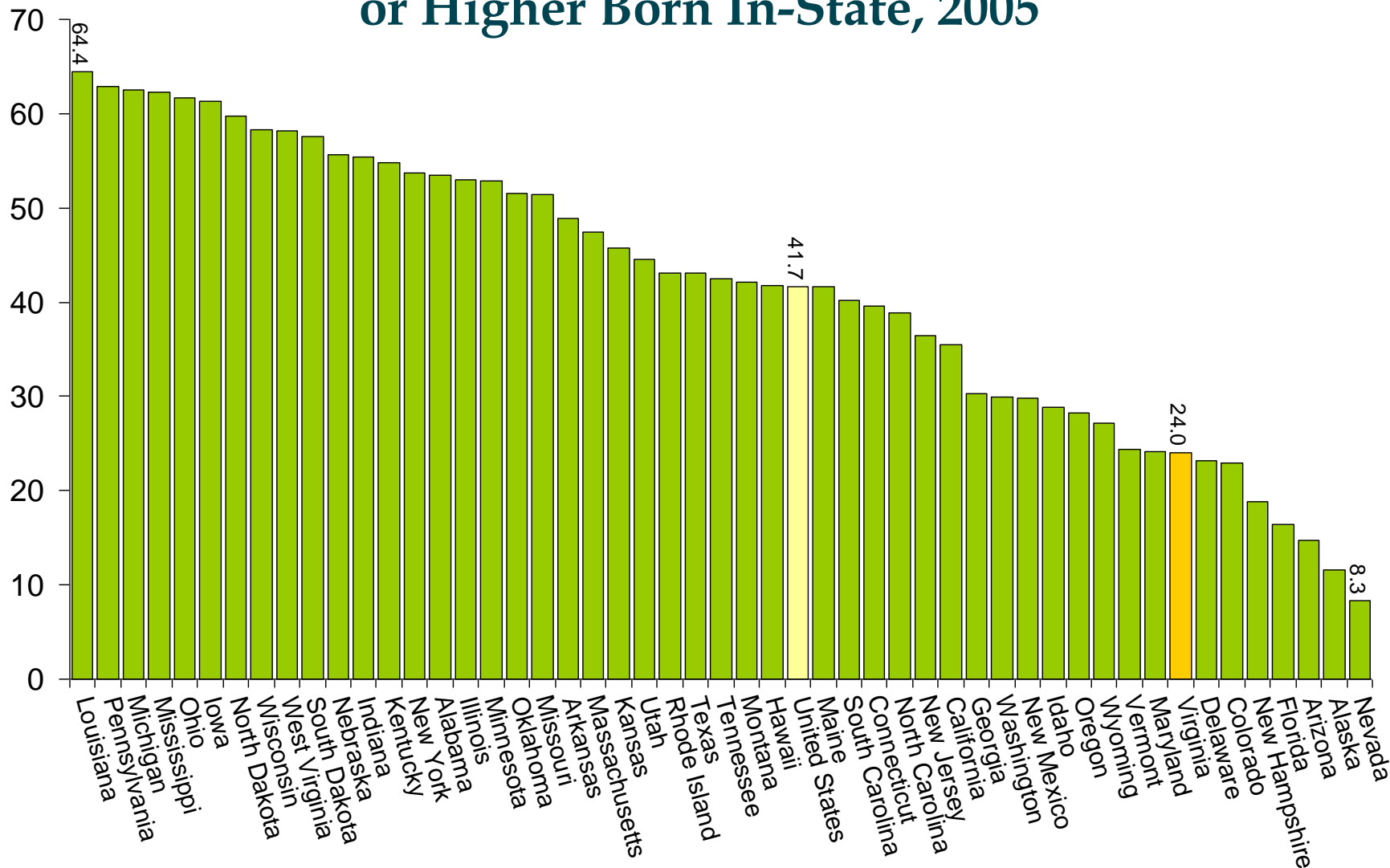


NOTE: Earnings based on persons age 18-64 reporting positive wages working 35+ hours per week. Earnings adjusted to July 2006 dollars.

Source: National Center for Higher Education Management Systems, Analysis based on U.S. Census Bureau, 2006 ACS PUMS File

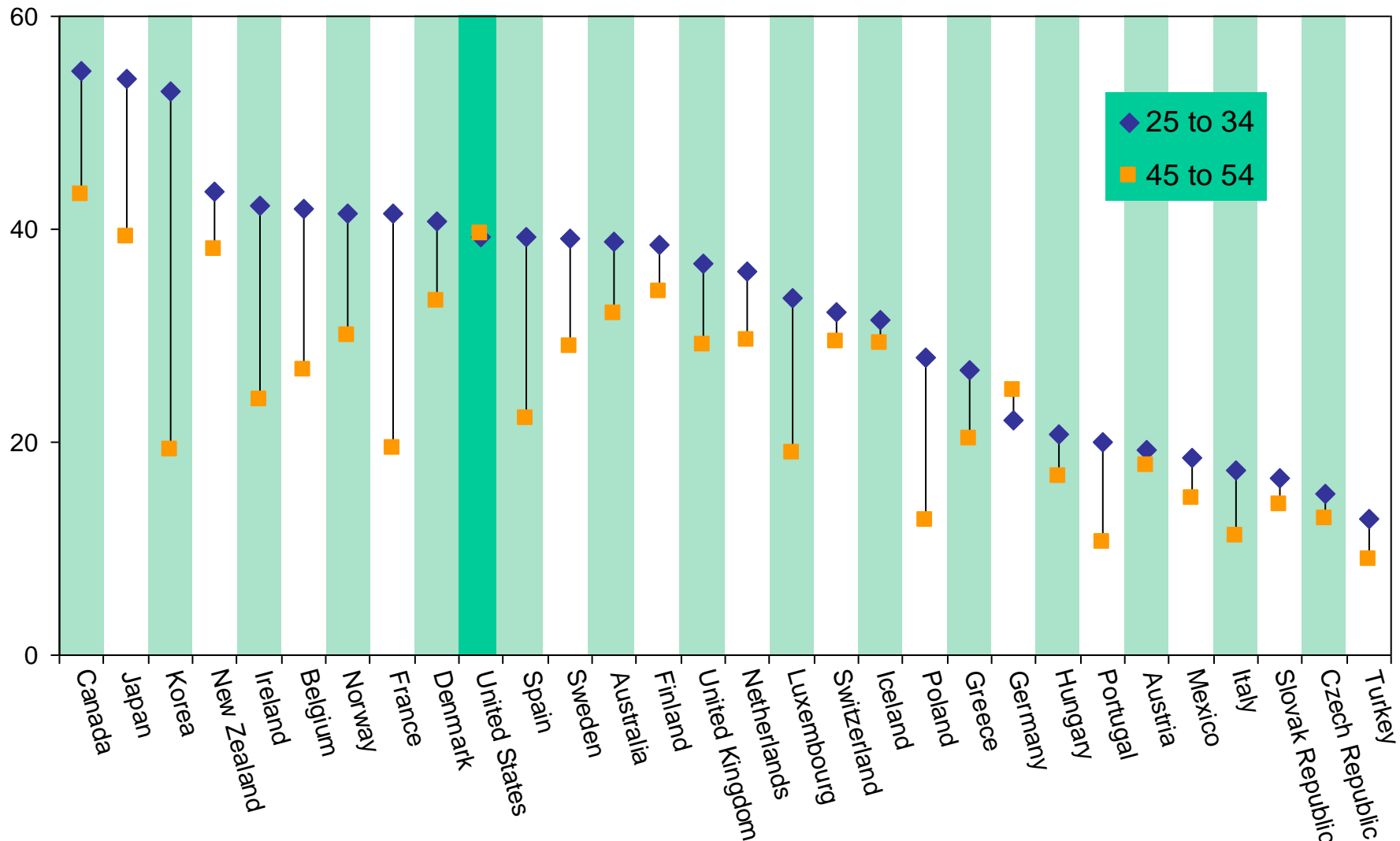


## Percent of Residents Age 25-64 with a Bachelor's Degree or Higher Born In-State, 2005



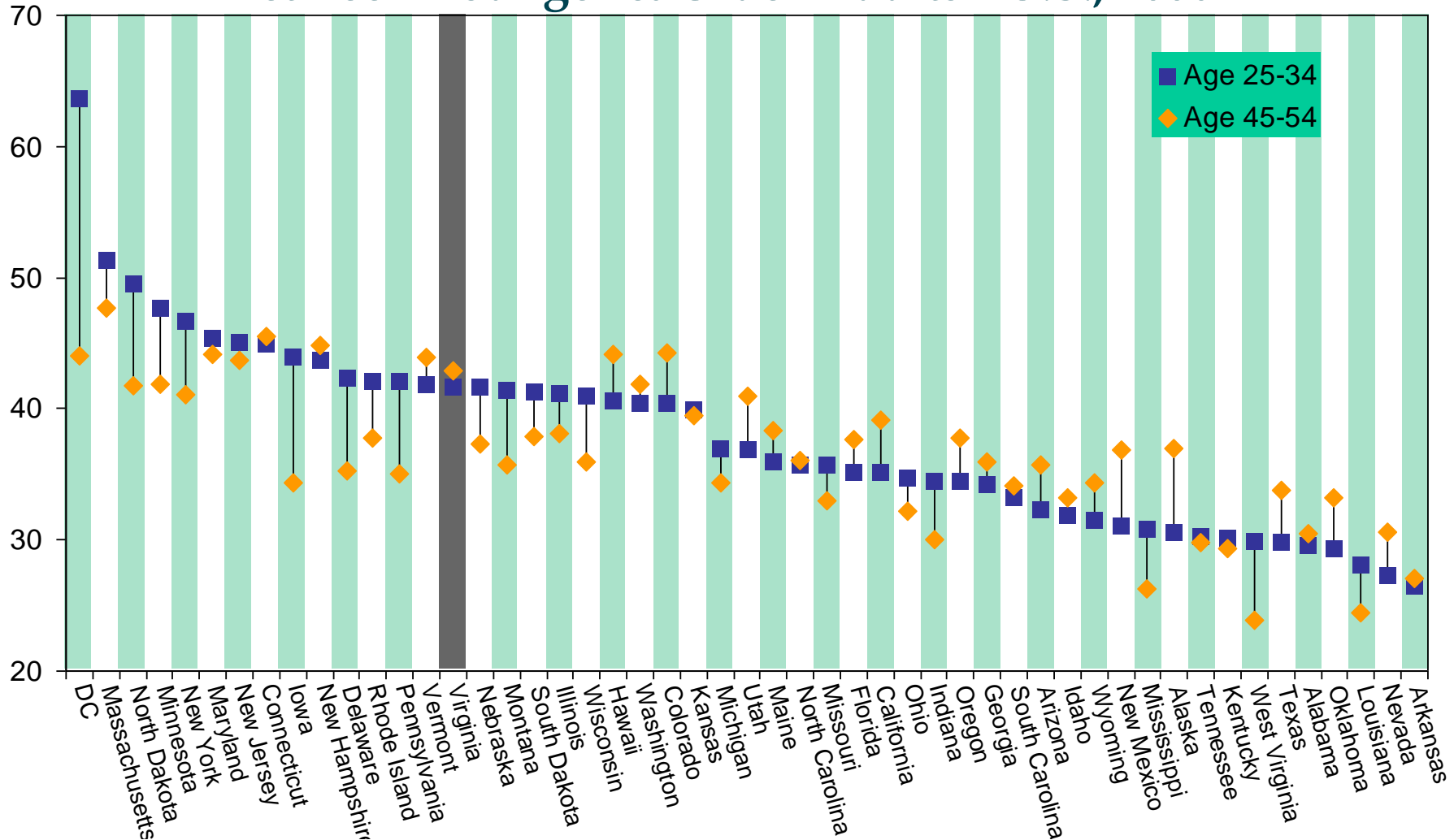


# Differences in College Attainment (Associate & Higher) Between Younger & Older Adults – U.S. & OECD Countries, 2006



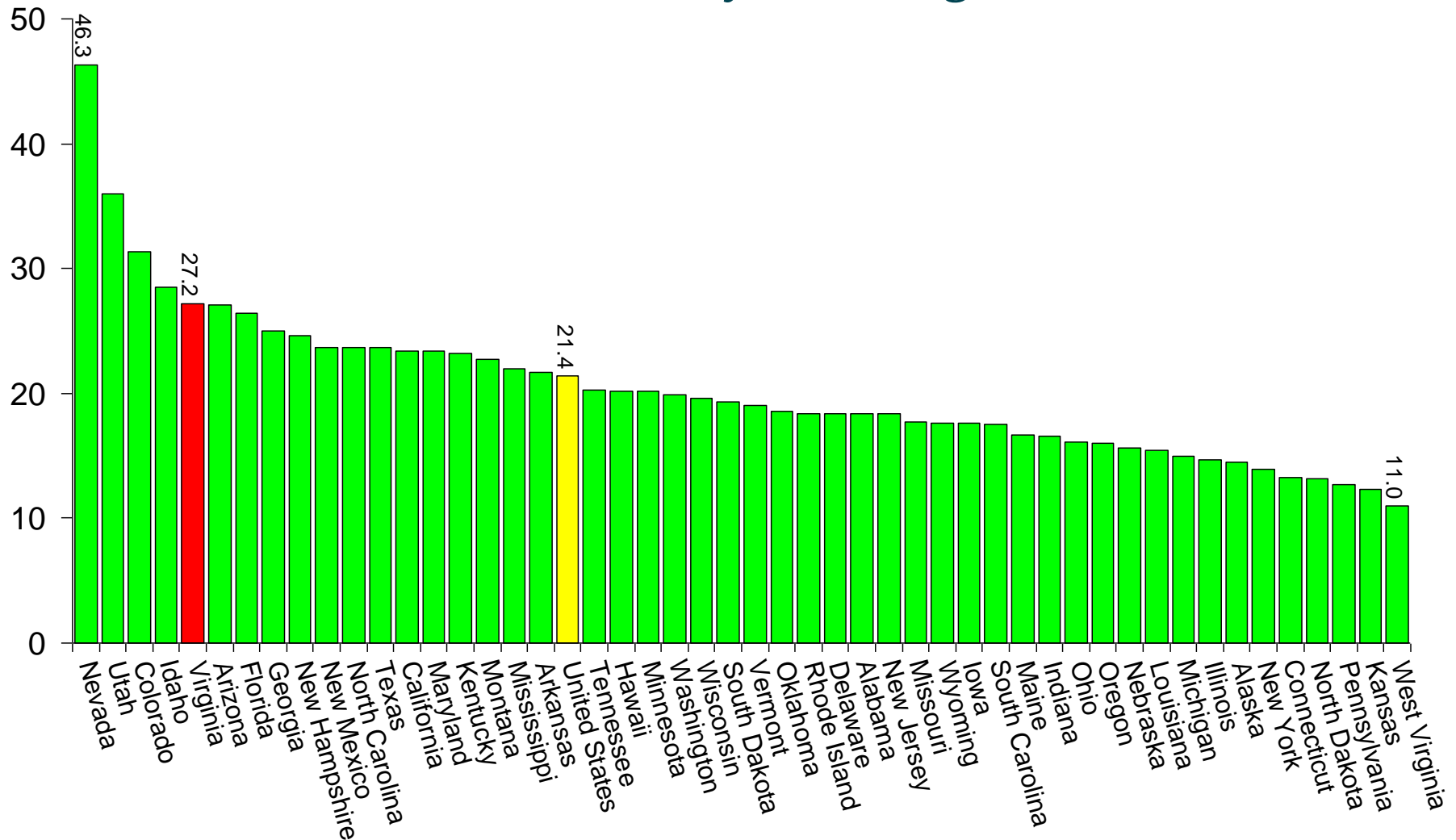


## Differences in College Attainment (Associate & Higher) Between Younger & Older Adults - U.S., 2006





# Projected Percent Change in Occupations Requiring Some Postsecondary Training, 2002-2012



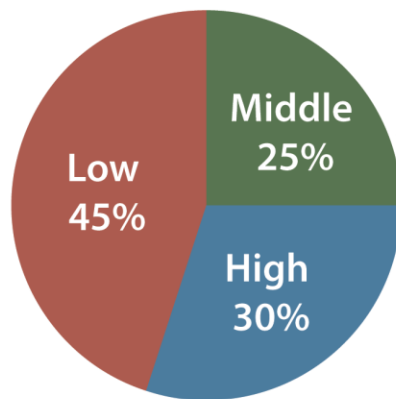




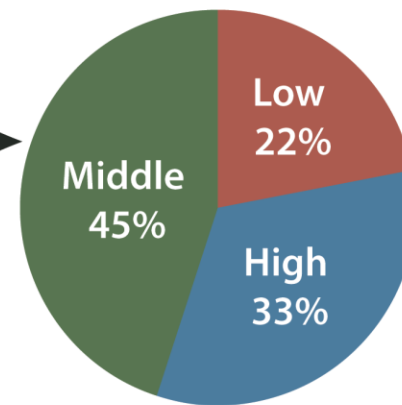
# Growing Demand for Highly Educated Workers

## Workforce Skill Levels vs. Projected Workplace Skill Demands

2007 Skill Levels in  
America's Workforce



2014 Demand for Skill  
Levels in the Workplace



20% Skills Gap

Source: Analysis by Chmura Economics and Analytics based on ACT data.

The supply side is based on education attainment. Low Skill = high school or less. Middle Skill = two years of education / training beyond high school. High Skill = four-year degree and higher.

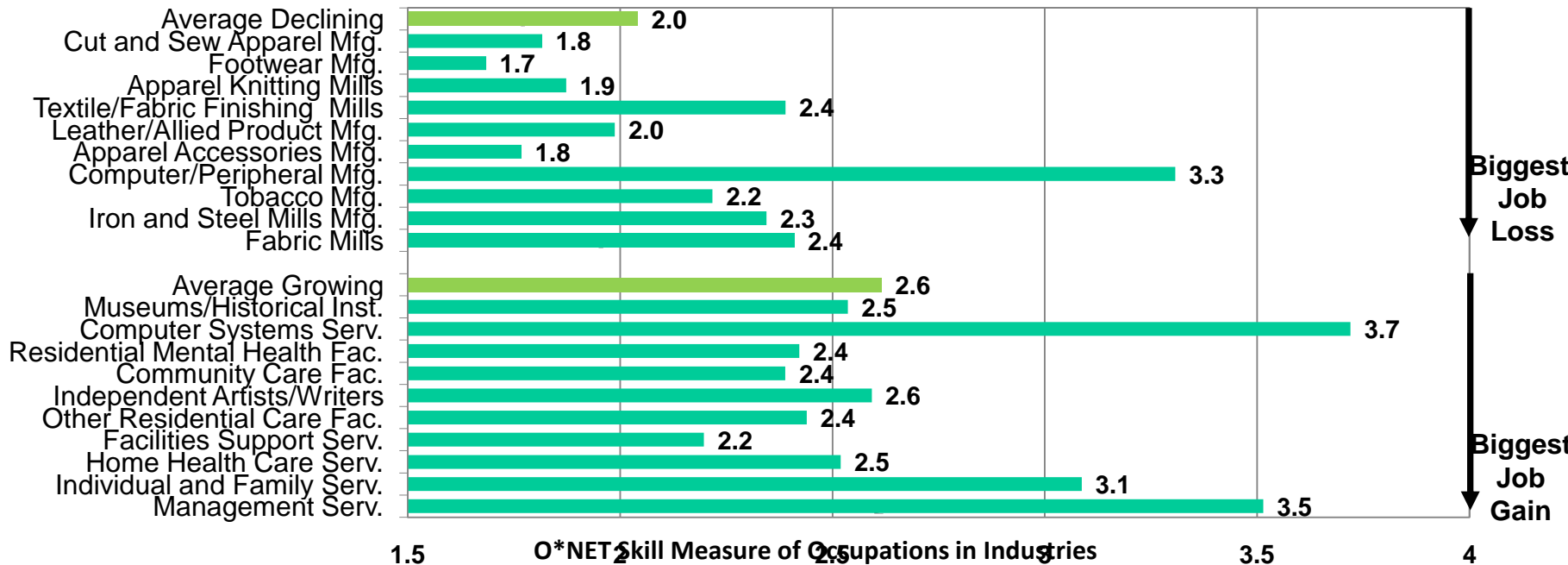
The demand side compares requirements of jobs based on education and/or skills needed to be successful on the job.

This information comes in part from the ACT Job Pro database and test and BLS O\*NET information.



# Higher Skills Needed for Fast Growing (Services) than Declining (Mfg) Industries

Occupational Skill of Fastest Growing and Declining Industries, Virginia, 2008-2018



Source: JobsEQ®, Chmura Economics and Analytics



# Study of the Economic Impact of Virginia Public Higher Education



WELDON COOPER  
CENTER FOR PUBLIC SERVICE  

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*University of Virginia*

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in association with  
John L. Knapp, Ph.D.  
William B. Shobe, Ph.D.

September 2009



# About the Study

- The first comprehensive analysis of the economic impact of Virginia's public higher education system.
- Two components measured:
  - Economic impact of higher education expenditures.
  - Economic impact of human capital development.
- Also projected economic impact of the Governor's plan for 100,000 additional degrees by 2025.
- The study is based on 2007 economic data, and all numbers expressed in terms of 2007 dollars.



## RETURN ON INVESTMENT IN VIRGINIA'S PUBLIC HIGHER EDUCATION



Based on 2007 data

source: Weldon Cooper Center for Public Service



# The Enormous Value from Investing in Higher Education

- A major finding from the study:  
The tax revenue generated for the Commonwealth of Virginia by its public higher education system exceeds the amount the state spends on that system.

**For every dollar the Commonwealth spends on public higher education, it receives \$1.39 in state tax revenue.**



# The Enormous Value from Investing in Higher Education

- The economic multiplier effect:  
Current expenditures on public higher education boost the state's economy by a factor of 13:1.

**For every dollar the Commonwealth spends on public higher education, it generates \$13.31 in gross domestic product (GDP).**



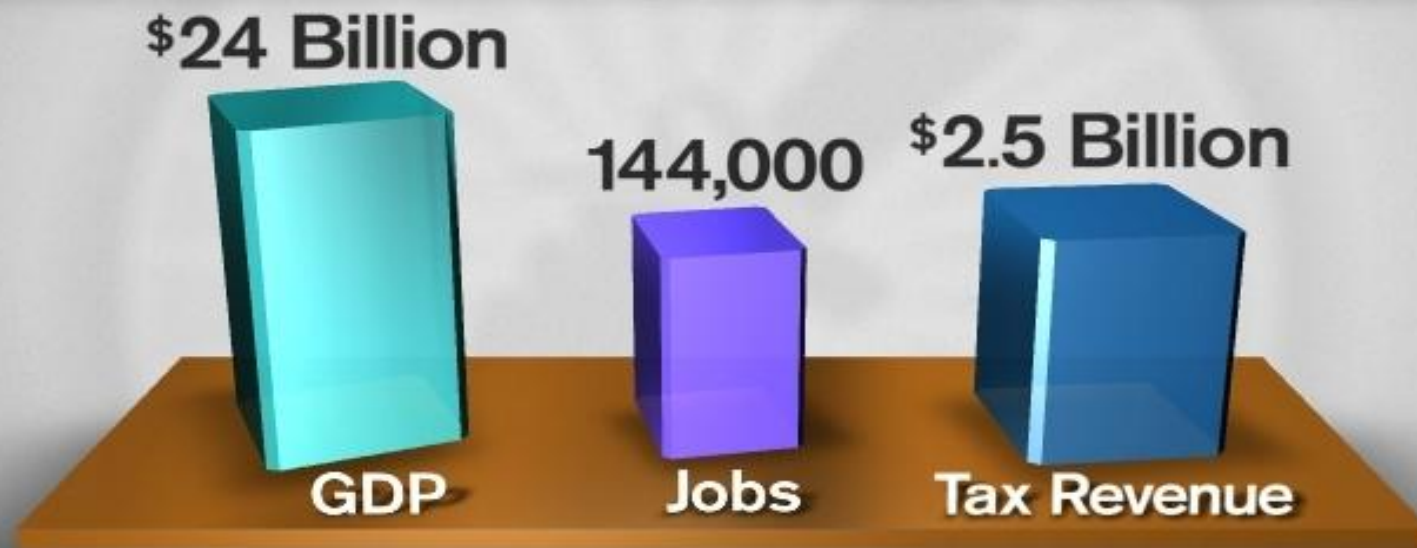
# Economic Impact at a Glance

- \$9.5 billion annually in purchases of goods and services in the Commonwealth
- 144,550 jobs supported by higher education operations
- Benefits of yearly investment in Va.'s public higher education system based on 2007 spending level:
  - \$24.0 billion contribution to the state's gross domestic product (GDP)
  - \$2.5 billion in tax revenues generated for the Commonwealth of Virginia





## BENEFITS FROM VIRGINIA'S YEARLY HIGHER EDUCATION INVESTMENT



Based on 2007 data

source: Weldon Cooper Center for Public Service



# Private and Social Benefits of Higher Education

- Having a degree reduces government expenditures for other social programs (food stamps, TANF, Medicaid, Corrections)

<u>Level of Education</u>	<u>Total Lifetime Spending (state and local)</u>
High School	\$28,047
Associate Degree	\$10,955
Bachelor's Degree	\$5,047
Master's Degree	\$3,139
Professional/Doctorate	\$1,181



# Social Cost Savings from Higher Education

- Dramatic positive impact on state spending:  
State government in Virginia spends significantly less on a range of social services each year because of the impact of its public higher education system.

**A single year's college degree production  
(at 2007 levels) accounts for \$349 million  
in cost savings to the Commonwealth**



## Lifetime State and Local Tax Revenues

- Having a degree **INCREASES** state and local tax revenues

<u>Level of Education</u>	<u>Total Lifetime Tax Revenues (state and local; present value)</u>
High School	\$92,450
Associate Degree	\$114,467
Bachelor's Degree	\$142,519
Master's Degree	\$165,957
Professional/Doctorate	\$157,931



# Leveraging Investment in Virginia

- The study reflects the major economic impact of the out-of-state dollars that flow into Virginia because of the public higher education system (i.e., for research, tuition, and purchases by students and visitors):

**– \$1.58 billion in Virginia GDP**  
**– 34,833 Virginia jobs**

- What's not included:
  - The study does not reflect the full impact of higher education's active participation in state and local efforts to attract new businesses and jobs to Virginia from other states and countries.



# Impact of Higher Ed Research

- The study reflects the direct economic impact of research activities at Virginia's public higher education institutions:

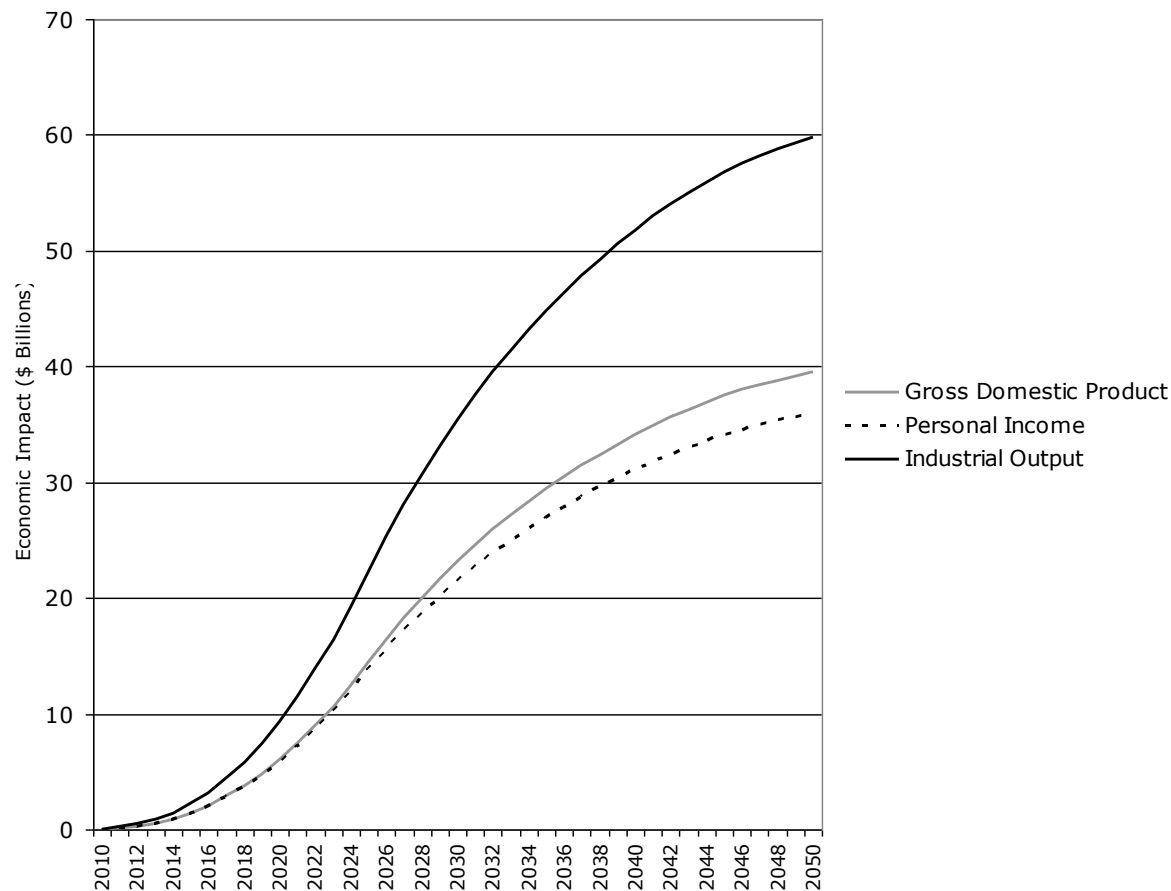
- **\$588 million in Virginia GDP**
- **12,927 Virginia jobs**
- **\$72 million in state tax revenues**

- What's not included:
  - The study does not capture the full impact of university-based research activities on technology-based development and the growth of private firms.



# Growing By Degrees

## What 100,000 More Degrees By 2025 Will Mean to Virginia's Economy





# Growing By Degrees

What 100,000 More Degrees By 2025  
Will Mean to Virginia's Economy

- \$39.5 billion more in Virginia GDP
- \$36.0 billion in increased personal income for Virginians
- \$4.1 billion in new tax revenues for state government





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